



10/620,654

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/620,654 : Confirmation No.: 1421
Applicant : Rabasco, et al
Filed : July 16, 2003
For : Polymer Emulsion Coatings For Cellulosic Substrates
With Improved Barrier Properties

Art Unit : 1773
Examiner : Tarazano, Donald Lawrence.
Docket No. : 06326 USA
Customer No. : 23543

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

<p align="center">CERTIFICATE OF MAILING</p> <p>I CERTIFY THAT THIS PAPER (ALONG WITH ANY PAPER REFERRED TO AS BEING ATTACHED OR ENCLOSED) IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE WITH SUFFICIENT POSTAGE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO:</p> <p align="center">COMMISSIONER FOR PATENTS P.O. BOX 1450 ALEXANDRIA, VA 22313-1450</p> <p>ON <u>14 Feb 2006</u></p> <p align="center">Date Mary E. Bongiorno</p> <p align="center">(Type or print name of person mailing paper)</p> <p align="center"><u>Mary E. Bongiorno</u></p> <p align="center">Signature of person mailing paper</p>
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Sir:

DECLARATION UNDER 37 CFR 1.132

Mr. Christian L. Daniels, the declarant hereby states the following:

1. that he has a Masters in the field of Polymer Science;
2. that he is employed by the assignee in the above application, i.e., Air Products Polymers, L.P. as a research chemist;
3. that his field of endeavor within the Product Research Group of Air Products Polymers, L.P. resides, *inter alia*, in the development of polymer emulsions for use as pressure sensitive adhesives, laminating adhesives, nonwoven binders, coatings, caulks, grouts, etc.;

4. that as Research Associate he has considerable experience in the design and development of vinyl acetate based emulsions, including vinyl acetate/ethylene emulsions, for the above recited applications;
5. that he is familiar with the subject matter described in the above-identified application and has actual knowledge of the physical properties of the vinyl acetate/ethylene polymers described in the above-identified application used as barrier coatings for cellulose and paper substrates;
6. that he has reviewed the Office Action of October 31, 2005 including more specifically the rejection of Claims 1-18 based upon the references Daniels, et al US 5,872,181 and Daniels, et al US 6,319,978;
7. that he has reviewed the amendment filed with the request for continued examination and the amendments to the claims which call for the use of cellulosic colloid stabilized vinyl acetate/ethylene polymers having the claimed properties as barrier coatings for moisture, oils, fats, and the like when applied to cellulosic and paper products;
8. that he understands from a reading of the Office Action that the Examiner has taken the position that there was clear reason to believe the polymers described in these Daniels, et al references would have thermal melting points of from 35 to 110 °C and heats of fusion within the range claimed in the above-identified application;
9. that as a coinventor in the Daniels, et al '181 reference and the '978 reference, he states that with regard to the polymers described in the Daniels, et al '181 and '978 references, none of the claimed vinyl acetate/ethylene polymers were observed to have ethylene crystallinity having a melting point of from 35 to 110 °C;
10. that the polymers described in '181 are laminating adhesives and typically stabilized with polyvinyl alcohol and these polymers do not have ethylene crystallinity having a melting point of from 35 to 110 °C;

11. that none of the commercial vinyl acetate/ethylene polymers described in the Daniels, et al '181 reference have ethylene crystallinity having a melting point of from 35 to 110 °C;
12. that the thermal properties of all vinyl acetate/ethylene polymers in Daniels, et al '181 and '978 are substantially different from those having ethylene crystallinity and a thermal melting point of from 35 to 110 °C as set forth in the claims in the above-identified application, even though some of the polymers in Daniels, et al '181 and '978 may have a tensile storage modulus within the range claimed; and,
13. that because the thermal properties of the respective polymers are different they find use in differing applications;

That all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true and further that these statements are made with knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.



Christian L. Daniels

Title: Research Associate

Date: 6 February 2006